

# RKP46PLB-0.5-RSP46PLB/TXL

## Supply Cable - M12 Power – Extension Cable



### Technical data

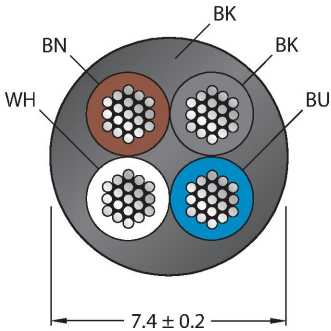
|                              |                                                              |
|------------------------------|--------------------------------------------------------------|
| Type                         | RKP46PLB-0.5-RSP46PLB/TXL                                    |
| ID                           | 100031152                                                    |
| Connector A                  | Female, M12 × 1, Straight, L-coded                           |
| Number of pins               | 4                                                            |
| Contacts                     | Copper-nickel, CuNi, Gold-plated                             |
| Contact carriers             | Plastic, PBT GF, Black                                       |
| Connector body               | Plastic, TPE, Black                                          |
| Coupling nut/screw           | Brass, CuZn, Nickel-plated                                   |
| Seal                         | Plastic, FPM/FKM                                             |
| Tightening torque (range)    | 0.5 ... 0.6 Nm<br>(observe max. torque of mating connector!) |
| Mechanical lifespan          | > 100 Mating cycles                                          |
| Pollution degree             | 3                                                            |
| Protection class             | IP65, IP67, IP69K, Only in screwed condition                 |
| Connector B                  | Male, M12 × 1, Straight, L-coded                             |
| Number of Pins               | 4                                                            |
| Contacts                     | Copper-nickel, CuNi, Gold-plated                             |
| Contact carriers             | Plastic, PBT GF, Black                                       |
| Connector body               | Plastic, TPE, Black                                          |
| Coupling nut/retaining screw | Brass, CuZn, Nickel-plated                                   |
| Tightening torque            | 0.5 ... 0.6 Nm<br>(observe max. torque of mating connector!) |
| Mechanical life              | > 100 Mating cycles                                          |
| Pollution degree             | 3                                                            |
| Protection class             | IP65, IP67, IP69K, Only when screwed together                |

### Features



- M12 female connector, L-coded, straight, 4-pin
- M12 male connector, L-coded, straight, 4-pin
- Jacket material: PUR
- Jacket color: black
- Highly resistant to oils, coolants, lubricants and emulsions
- Suitable for use in drag chains
- Resistant to vibrations and shocks
- Flame retardant
- Halogen-free
- RoHS compliant
- UL approval
- Protection class: IP65, IP67, IP69K
- Cable length: 0.5 m

### Cable Cross-Section



### Contact assignment

Technical data

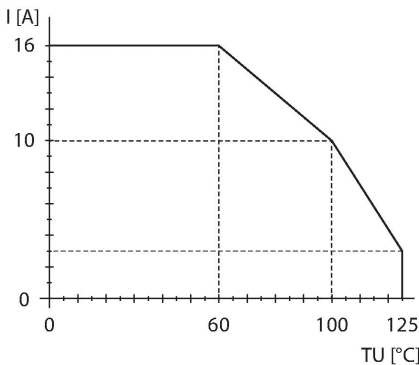
| Cable                                    |                                        |
|------------------------------------------|----------------------------------------|
| Cable diameter                           | Ø 7.4 mm ±0.20                         |
| Cable length                             | 0.5 m                                  |
| Cable jacket                             | PUR, Black                             |
| Core insulation                          | PP                                     |
| Core cross-section                       | 4 x 1.5 mm <sup>2</sup>                |
| Core colors                              | BN, WH, BU, BK                         |
| Electrical properties at +20 °C          |                                        |
| Rated voltage                            | 50 V <sub>AC</sub> /60 V <sub>DC</sub> |
| Current                                  | 16 A                                   |
| Mechanical and chemical properties       |                                        |
| Bending radius (stationary installation) | ≥ 4 x Ø                                |
| Bending radius (flexible use)            | ≥ 7 x Ø                                |
| Bending cycles                           | ≥ 10 million                           |
| Admissible acceleration                  | max. 5 m/s <sup>2</sup>                |
| Admissible travel path, horizontal       | 5 m (at 5 m/s <sup>2</sup> )           |
| Torsional stress                         | ± 30 °/m                               |
| Ambient temperature (fixed)              | -40...+80 °C                           |
| Ambient temperature (mobile)             | -30...+80 °C                           |
| Ambient temperature (drag chain)         | -20...+60 °C                           |
| Qualified for drag chain use             | yes                                    |
| Halogen-free                             | yes                                    |
| Oil-resistant                            | yes                                    |
| Flame-retardant                          | yes                                    |
| Approvals                                | cULus                                  |



Circuit Diagram



Derating Curve



Accessories

| Dimension drawing | Type                  | ID        |                                                                                                                                                                            |
|-------------------|-----------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   | LABEL-HOLDER-FLEX-PVC | 100048170 | PVC label holder for identification of extension cables (TEL/TXL product series); for cable diameters: min. 5 mm; dimensions 4 x 18 mm; delivery unit: 50 pcs. per package |
|                   | VH2-M12L-M5-2F5       | 100028587 | Small h-splitter, M12 Power, L-coded, 4-pin + FE                                                                                                                           |
|                   | VH3-M12L-M5-3F5       | 100028591 | Large H-splitter, M12 Power, L-coded, 4-pin + FE                                                                                                                           |
|                   | VT2-M12L-M5-2F5       | 100028579 | T-splitter, M12 Power, L-coded, 4-pin + FE                                                                                                                                 |